

Lake Huron,

1894.

Notes and Interviews by
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Joint Fisheries Commission.

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GENERAL REVIEW OF THE COMMERCIAL FISHERIES OF
LAKE HURON.

By

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The fish of Lake Huron that are of commercial value are the Mackinaw trout, the common and the menominee whitefish, the wall-eyed pike, called pickerel, the Lake herring and the sturgeon. To these may be added suckers and the yellow perch which are sold in considerable quantities from Saginaw River and Bay during the winter. The muskalunge, grass pike, black bass and others are caught in small quantities but are scarcely of commercial importance.

In the St. Clair River many pickerel are taken by trolling and at the head of the river pickerel, sturgeon and other fish are taken with the seine. The gravel beds in this locality afford good spawning grounds for some varieties of fish. From just above Port Hu-

ron to Sand Beach the coast is very uniform; no bays or points worth mentioning; within this distance the Lake receives many small streams, but none permanent enough or large enough to make them available for spawning fish. The Lake is encroaching on this coast so that sediments of sand and clay are constantly forming along the shore, the bottom consisting of a thin layer of sediments over hard pan or rock so that it is difficult to find ground where net stakes can be driven. In the whole distance there are no good spawning grounds in the shallow waters or tributary streams. And this strip of coast does not seem to be a good feeding ground. The pickerel, trout, whitefish, sturgeon and other fish caught in the pound nets along this coast seem to be mere stragglers from the great schools of fish found on spawning grounds, feeding grounds, or in motion between such grounds. The herring are caught in great numbers during the fall and appear to be as numerous as ever, while the other kinds have greatly diminished in numbers and in size of individuals.

The fishermen along this coast do not seem prosperous; their income is mainly from the herring catch.

From Sand Beach around to Oak Point, a distance of about forty miles, the coast is rocky or sandy, and there is not a pound net in the whole distance. The coast is exposed to northerly winds, has no good feeding or spawning grounds and is frequented by so few fish that fishermen are not attracted to its stormy waters.

Saginaw River is the largest tributary of Lake Huron. This river and the shallow waters of Saginaw Bay near the mouth of the river constitute the principal spawning ground for the wall-eyed pike of Lake Huron. These fish spawn in the spring just as the ice is breaking up, and the scores and scores of nets off the islands along the shores of Saginaw Bay from Oak Point around to Tawas were put out for the purpose of catching these pike as they move slowly back toward the deep waters of the Lake after spawning.

The catch is pickerel, herring, catfish,

suckers, perch, with some whitefish and trout. More pickerel are caught in the spring, more herring in the fall. The wall-eyed pike is the fish of Saginaw Bay. One man said we all fish for pickerel, but we often make more money from the other fish caught, than from them. No spawning fish are caught.

About the Charity Islands there are good spawning beds for whitefish and this fish makes up a larger part of the catch in the region of these islands.

North of Tawas there are several good grounds for spawning whitefish and spawning grounds for trout are not far away. The main catch consists of whitefish and trout with an abundance of herring in the fall. In addition to these menominee whitefish, pickerel, suckers and perch are caught.

Gill net fishing is carried on extensively off Sand Beach, Port Austin, Tawas, Oscoda or Au Sable, Alpena, Rogers City and in the neighborhood of Spectacle reef, south of Point Detour. During the season American fishermen have as many as 150 miles of twine in these waters. The nets are set from 5 to 30 miles

off shore in water from 10 to 60 fathoms deep. The catch of the gill nets is mainly trout and whitefish all of good size.

As to the movements of the fish the testimony was conflicting. The fish doubtless move from their spawning grounds to their feeding grounds and back again. There seems also to be more or less movements of fish along the coast perhaps in search of food. Then there appears to be movements of fish from deep to shallow water and back again. The movement of the pickerel into Saginaw Bay during the winter and out again in the spring is the most definite and best known movement of Lake Huron fish. Many think that whitefish come from Lake Superior into Lake Huron in the spring, large numbers turning westward into Lake Michigan. Others think the main movement of the whitefish is from deep water to shallow water and back again, and each party has more or less evidence which seems to sustain its view of the case.

In regard to the number of fish now as

compared with the past much interesting evidence was taken. Herring, perch and suckers seem to be as abundant as ever; trout and pickerel have decreased somewhat, while the whitefish and sturgeon are but a fraction of their former numbers.

Sawdust from mills, bark from rafts of logs, ashes and cinders from steamers, offal of fish, sewage from towns and other operations of civilization may have so defiled many portions of the Lake as to make it distasteful to some fish, forcing them to migrate to other localities without endangering their lives.

The diminished number of fish is due to over fishing with small meshed nets. The whitefish has suffered more than the trout, as it is more frequently found in shallow water and has been the prey of the small meshed pound net. The trout are found in deeper water and still exist in great numbers and many of the gill net fishermen are making money.

During the season of 1893 Joe Ferguson of Au Sable is said to have cleared about \$7,000., Dave Lincoln, of Alpena about \$6,000, and Wil-

liam Hunkett, of Sand Beach, made over \$3,000 for his employers, and many others found it a profitable season. The pickerel are also fairly abundant still.

If all pound nets used during the spring and summer up to the time of the herring run were of $3\frac{1}{2}$ or 4 inch mesh, front, sides and back, with smaller mesh nets in the fall for the herring, the whitefish would soon be more abundant and of better size. If to this measure be added a judicious planting of whitefish, trout and pickerel, there would continue to be an ample supply of these fish in spite of the extensive fishing operations.

In regard to the sturgeon, I could get no data that would help me to see any way of hindering their destruction.

The pound nets consist of leader, heart, funnel and pot. Sometimes a pound stands by itself, but often several are combined together forming a series or string of pounds. The leader commences at the shore or at any distance from the shore up to a half mile or more, depending on the depth of water and nature

of the bottom. The leaders are commonly from 40 to 50 rods long, sometimes less, sometimes as long as 70 or 80 rods or even longer.

The heart, which, following the curves is from 7 to 10 rods long, with funnel extends 4 or 5 rods from the end of the leader to the pot.

The pot is usually 28, 30 or 32 ft. square and about as deep as the water in which it stands. Among the islands toward the north the water deepens rapidly and single pounds are more common and these sometimes quite deep, 60 or 70 ft. being common. While in the bay and other shallow water long strings of pounds occur, but seldom reaching a depth of more than 35 or 40 ft.

The nets are made of cotton twine, the mesh of the leader is from 6 to 8 inches, of the heart from 4 to 5 inches, of the pot 3 to 3 $\frac{1}{2}$ inches in front and on the sides, with a 2 to 2 $\frac{1}{2}$ inch mesh in the back. The twine is usually treated with hot tar to prevent decay, which operation shrinks the mesh from $\frac{1}{5}$ to $\frac{1}{4}$ in size.

Besides these pounds in the Bay or Lake we found a few small pounds near Bay port and in the Quanna River. The pots were 10 or 12 ft. square in shallow water, with only 75 or 100 feet leaders. The mesh usually smaller than in the larger ones. About Bay-port and in the mouths of some rivers on the west side of the Bay there were a few Fyke nets. These usually were of small mesh.

The gill nets were usually of linen twine, usually of nearly 5 inch mesh.

Pound nets belonging to different parties are seldom less than one mile apart, yet pounds belonging to the same parties were often within half that distance of each other without any apparent detriment.

The decrease in the number of fish is generally charged to the pound nets. Whether this be just to the pound nets or not the catch of the pound nets, reaching out scarcely a mile from shore, and occurring at wide intervals, indicates that a large portion of the fish of Lake Huron spend their time near the shore, especially at certain seasons of the year. And it seems certain that they move to

and from the shore as well as along the shore.

In pleasant weather the inside pounds often get more fish. In stormy weather the outside pounds are said to do best.